

CLAIMS

We claim:

1. A method providing a facsimile service, the method comprising:
receiving a facsimile sent to a telephone number;
responsive to receiving the facsimile:
 - (a) converting the facsimile from a fax format to a printable data format;
 - (b) wrapping the converted facsimile in a network transfer protocol language;
 - (c) identifying a Universal Resource Locator (URL) that corresponds to the telephone number, the URL identifying an embedded web server in a printer; and
 - (d) communicating the wrapped facsimile to the embedded web server for printing by the printer.
2. A method as recited in claim 1, wherein the network transfer protocol language is HTTP or XML.
3. A method as recited in claim 1, wherein the printable data format comprises a PDF format, a GIF format, a JPG format, an ASCII format, or a PCL format.
4. A method as recited in claim 1 that is performed by a Point of Presence (POP) service provider.

5. A method as recited in claim 1 that is performed by a service provider that is implemented on the printer.

6. A method as recited in claim 1 that is performed by a service provider that is implemented between a phone jack, a telephone, and the printer.

7. A method as recited in claim 1, the method further comprising:
responsive to the communicating, receiving a message from the web server, the message corresponding to a status of the communicated facsimile.

8. A method as recited in claim 1:
wherein in the receiving, the facsimile is received by a server; and
wherein the wrapped facsimile comprises a header that indicates an address that corresponds to the server; and,
wherein the method further comprises:
responsive to communicating the wrapped facsimile to the embedded web server, receiving a message from the embedded web server at the address, the message corresponding to a status of the communicated facsimile.

9. A method as recited in claim 8:
wherein the URL is a first URL;
wherein the address is selected from a set of addresses that comprise an e-mail address or a second URL; and
wherein the message comprises a successful print indication, a paper out indication, a toner out indication, or a paper jam indication.

10. A method as recited in claim 1:
wherein in the receiving, the facsimile is sent by a sender;
the method further comprising:
 responsive to the communicating, receiving a message from the web server that corresponds to the communicated facsimile; and
 responsive to receiving the message, forwarding a status to an entity selected from a group of entities comprising the sender or the embedded web server, the status indicating success or failure of the communicating.

11. One or more computer-readable media containing a computer executable program that performs a method as recited in claim 1.

12. A method comprising:
receiving, by a service provider, a facsimile sent to a telephone number;
responsive to receiving the facsimile:
 (a) converting the facsimile from a fax format to a printable data format;
 (b) wrapping the converted facsimile in a network transfer protocol language;
 (c) identifying a Universal Resource Locator (URL) that corresponds to the telephone number; the URL identifying a web server module that is embedded in a printer;
 (d) communicating the wrapped facsimile to the web server for printing by the printer;

(e) receiving, by the web server module, the communicated facsimile; and

(f) responsive to receiving the communicated facsimile, printing, by the printer, the communicated facsimile.

13. A method as recited in claim 12, wherein the network transfer protocol language is HTTP.

14. A method as recited in claim 12, wherein the printable data format comprises a PDF format, a GIF format, a JPG format, an ASCII format, or a PCL format.

15. A method as recited in claim 12, the method further comprising:
responsive to the communicating, receiving, by the service provider, a message from the web server module, the message corresponding to a status of the communicated facsimile.

16. A method as recited in claim 12:
wherein the wrapped facsimile comprises a header that indicates an address that corresponds to the service provider; and,
wherein the method further comprises:
responsive to communicating the wrapped facsimile to the web server module, receiving a message from the web server module at the address, the message corresponding to a status of the communicated facsimile.

17. A method as recited in claim 16:
wherein the URL is a first URL;
wherein the address is selected from a set of addresses that comprise an e-mail address or a second URL; and
wherein the message comprises a successful print indication, a paper out indication, a toner out indication, or a paper jam indication.

18. A method as recited in claim 12:
wherein in the receiving, the facsimile is sent by a sender; and
wherein the method further comprises:
responsive to the communicating, receiving a message, by the service provider, from the web server module, the message corresponding to the communicated facsimile; and
responsive to receiving the message, forwarding, by the service provider, a status to an entity selected from a group of entities comprising the sender or the web server module, the status indicating success or failure of the communicating.

19. One or more computer-readable media containing a computer executable program that performs a method as recited in claim 12.

20. An apparatus comprising:
a service provider module operatively coupled to a telephone network;
an embedded web server module that is operatively coupled to the service provider module; and

a printer module operatively coupled to the embedded web server module; wherein the service provider module is configured to receive a facsimile sent to a telephone number that corresponds to the embedded web server module, and communicate the facsimile to the embedded web server module in a manner that enables the printer module to print the communicated facsimile.

21. An apparatus as recited in claim 20, wherein the service provider module is further configured to:

- (a) convert the facsimile from a fax format to a printable data format;
- (b) wrap the converted facsimile in a network transfer protocol language;
- (c) identify a Universal Resource Locator (URL) that corresponds to the telephone number; the URL identifying the web server module; and
- (d) communicate the wrapped facsimile to URL.

22. An apparatus as recited in claim 20, wherein the embedded web server module is configured to receive the wrapped facsimile from the service provider module, and responsive to receiving the wrapped facsimile, the embedded web server module is further configured to send the facsimile to the printer module for printing.

23. An apparatus as recited in claim 20, wherein the printer module is configured to receive the facsimile from the embedded web server module, and responsive to receiving the facsimile, the printer configuration module is further configured to print the facsimile.

24. An apparatus as recited in claim 21, wherein the network transfer protocol language is HTTP.

25. An apparatus as recited in claim 21, wherein the printable data format comprises a PDF format, a GIF format, a JPG format, an ASCII format, or a PCL format.

26. An apparatus as recited in claim 20:

wherein the web server module is further configured to receive the facsimile from the printer module; and

wherein the embedded web server module is further configured to forward a message corresponding to the communicated facsimile to the service provider module in response to the communicated facsimile being successfully printed.

27. An apparatus as recited in claim 26, wherein the message comprises a successful print indication, a paper out indication, a toner out indication, or a paper jam indication.

28. An apparatus as recited in claim 21:

wherein the wrapped facsimile comprises a header that indicates an address that corresponds to the service provider module; and,

wherein the service provider module is further configured to receive a message from the web server module at the address, the message corresponding to a status of the communicated facsimile.

29. An apparatus as recited in claim 20:

wherein the service provider module is further configured to receive a message from the web server module that corresponds to the communicated facsimile, and wherein the service provider module is further configured to forward the message to an originator of the facsimile.

30. An apparatus as recited in claim 29, wherein the message comprises a successful print indication, a paper out indication, a toner out indication, or a paper jam indication.

31. A printer comprising:

an embedded web server that is configured to receive an HTTP message that comprises a facsimile message sent to a telephone number, the fax message having been converted from a facsimile format to a printer format; and
wherein the printer is configured to print the facsimile message.

32. A printer as recited in claim 31, wherein the printer format comprises a PDF format, a GIF format, a JPG format, an ASCII format, or a PCL format.